

well covered with distinct, though not large, tubercles, and each tubercle, with few exceptions, bears a large, curved, and somewhat finger-like seta. The prothorax is nearly smooth on the disc and without reticulation of any sort. It is set with numerous, heavy, tapering setae—fashioned much like the cephalic ones—and has the conventional six pairs of major setae, in their usual positions: four on the pronotum, one on the epimera, and one on the fore coxae. All of these last have conspicuously dilated tips. In the original description, this part of the body is said to be “not so distinctly reticulate” as the head, and “fringed with numerous curved hyaline bristles which are dilated at the tip, the postero-lateral bristle long, curved . . . other bristles comparatively small.”

Following are measurements, in microns except as otherwise noted, of the single specimen, a de-alated macropterous female: Length about 1.6 mm. (distended, 1.86 mm). Head, total length 245, width across eyes 148, least width just behind eyes 129, greatest width across cheeks 151, least width near base 123, width across basal collar 129, greatest width in front of eyes 93, width of frontal costa 19. Eyes, dorsal length 64, dorsal width 40, dorsal interval 68. Median ocellus, diameter 15. Postocular setae, length 63, interval 107, distance from eyes 20. Mouth-cone, length beyond posterior dorsal margin of head 146. Prothorax, median length of pronotum 160, width across coxae 290, length of antero-marginal setae 50, antero-angulars 54, midlaterals 55, epimerals 82, postero-marginals 67, coxals 50. Mesothorax, width across anterior angles 302. Metathorax, greatest width posteriorly 315. Abdomen, greatest width (at segment III) 343; tube (segment X, only), length 163, width across basal collar 62, greatest subbasal width 57, least apical width 29, terminal setae 94; segment IX, seta I 92, II 80. Lengths of antennal segments: I 50 (dorsal, exposed length only 29), II 60, III 60, IV 56, V 54, VI 53, VII 53, VIII 27; total length of antennae 413.

A NEW SPECIES OF *DENDROCORIS* AND A NEW COMBINATION OF *ATIZIES*

(HEMIPTERA, PENTATOMIDAE)

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Since the author's recent revision of the genus *Dendrocoris* (Proc. Ent. Soc. Wash. 57: 49-67, 1955), a new species of *Dendrocoris*, herein described, and a new combination of *Atizies* have been recognized. In the revision *Atizies* was placed as a synonym of *Dendrocoris* on the basis of *A. suffultus* Distant. Another species of *Atizies*, called to the author's attention by Mr. D. Leston, of London, England, was described by L. Ancona N. in “Los jumiles de Taxco (Gro.) *Atizies tarcoensis* spec. nov.” (An. del Inst. de Biol. 3:149-162, 19) As the reference was not available to the author, Dr. R. I. Sailer, of the U. S. National Museum, kindly checked the original description and drawings. He states that the drawing of the underside shows the bifurcate metasternal plate or metaxyphus that is so characteristic of the Edessini and that *A. tarcoensis* belongs to the genus *Edessa* and is possibly a synonym of *E. conspersa* Stål.

***Dendrocoris parapini*, new species**

This species resembles *D. pini* Montandon closely but has a relatively narrower head (especially noticeable in that part anterior to the eyes) and concave antero-lateral pronotal margins, which are straight or slightly convex in *pini* (see figs. 1 and 2).

Color.—Pale yellow ochraceous above and beneath, with ferruginous tints on head above. Punctures concolorous with body except for dark brown to black punctures along lateral margins of juga, antero-lateral margins of pronotum, and a few along lateral margins of hemelytra. Antennae rufo-ferruginous, paler toward base. Rostrum colored as body with dark markings typical of this genus. Legs colored as body, tarsi rufo-ferruginous. Abdominal segments with dark antero- and postero-lateral angles as seen from a lateral view. Spiracles colored as body.

Structure.—General form oval. Head width to length a ratio of 1.05 to 1, obliquely narrowed to rounded front; vertex and base of tylus convex; juga contiguous in front. Disk of pronotum with a few irregular raised smooth areas laterally and anteriorly; humeri not prominent, lateral margins before humeri slightly concave. Scutellum with impunctate areas along lateral margins and on disk. Hemelytra with impunctate areas located irregularly on their surface. Length: ♀, 6.7 mm. Width: ♀, 3.4-3.8 mm.

Female genitalia.—Essentially as in *pini* except that the genital plates are largely or completely hidden by sixth abdominal segment.

Variation.—Dark punctures occur on the posterior margin of pronotum in one specimen. Coloration and structure quite constant in the specimens available.

Type Material.—Described from seven females.

Holotype: NEW MEXICO: Las Vegas, August 12, H. S. Barber and Schwarz. U. S. National Museum Type Cat. No. 63453.

Paratypes: NEW MEXICO: 1 Las Vegas, August 16, Barber and Schwarz; 1 Santa Fe, July 21, 1926, E. C. Van Dyke; 1 Jemez

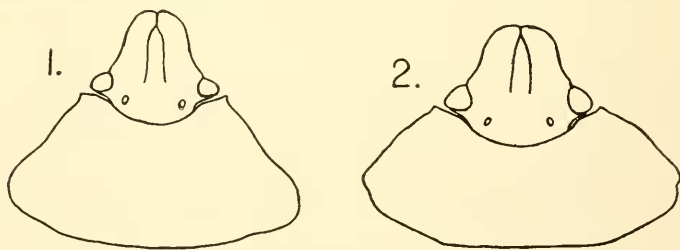


Fig. 1, *Dendrocoris parapini* Nelson, outline of head and pronotum; fig. 2, *D. pini* Montandon, outline of head and pronotum.

Springs, July 1, 1916, J. Woodgate; TEXAS: 3 Jeff Davis Co., June 20, 1952, July 4, 1953, and July 6, 1953, D. J. and J. N. Knull. These paratypes are distributed in the following collections: 2, U. S. National Museum; 3, Ohio State University Collection; 1, California Academy of Sciences.

It is possible that additional specimens of *parapini* are present in some collections under the name *pini* Montandon: Specimens identified as *pini* are especially suspect if they were collected in New Mexico or Texas.

HOST FEEDING OF *CULISETA MORSITANS*

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The ecology and bionomics of mosquitoes feeding on avian hosts have recently become important, as epidemiological studies involve wild birds and domestic pheasants as hosts of eastern equine encephalitis. However, knowledge of many mosquito species, particularly of the host-feeding preference, is not available. This article reports observations on the biology of one of these little known species, *Culiseta morsitans*.

The biology of the larvae of this species was published by Horsfall in 1955, but little has been reported on the feeding habits of the adult.

Carpenter and LaCasse (1955) say the females of the species rarely, if ever, feed on man. They indicate that *C. morsitans* probably feeds on birds and cite an account of a female feeding upon the blood of a breenfinch (Natyig 1948). However, there is little evidence concerning the source of the blood meal of this species. There is no indication that this mosquito even requires blood, since engorged specimens have not been reported. Wesenberg-Lund (1921) examined thousands of wild females and found none with blood in the alimentary tract.

Experimental.—Biweekly collections of *morsitans* adults were obtained from diurnal resting places in the vicinity of a domestic pheasant pen at Shade Swamp, Connecticut, throughout the early summer of 1956. During two 4-week periods, prior to and after 6-week-old pheasants were placed in the pen, the number of female *C. morsitans* containing fresh blood were counted and recorded. Blood smears from specimens containing fresh blood meals were prepared for microscopic examination.

Results.—Within a 4-week period, from June 16 to July 14, 1956, pheasants were placed in the pen, the number of female *C. morsitans* contained fresh blood meals out of a total of 115 females of this species collected. However, the collection taken during the first week after the pheasants were in the pen, July 14 to July 21, contained 18 blooded specimens out of 27. The incidence of blooded specimens in collections during the next 2 weeks remained high and then dropped in the fourth week. In the second week, July 21 to July 28, 6 were blooded out of 14 collected. In the third week, July 28 to August 4, 6 were blooded out of 23 specimens. During the fourth week, August 4 to August 11, 1 out of 14 had engorged with blood. In this 4-week period after the young pheasants were placed in the pen, a total of 31 blooded specimens out of 88 *C. morsitans* were collected. The percentage incidence of blooded specimens for this 4-week period was 35.2 percent as compared with 2.6 percent for the previous 4-week